AD_____

GRANT NUMBER: DAMD17-94-J-4507

TITLE: Managing Menopausal Symptoms in Breast Cancer Survivors

PRINCIPAL INVESTIGATOR: Dr. Patricia A. Ganz

CONTRACTING ORGANIZATION: University of California, Los Angeles
Los Angeles, California 90024

REPORT DATE: October 1995

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for public release;
distribution unlimited

# REPORT DOCUMENTATION PAGE

*Form Approved*
*OMB No. 0704-0188*



| 1. AGENCY USE ONLY *(Leave blank)* | 2. REPORT DATE | 3. REPORT TYPE AND DATES COVERED |
|---|---|---|
| | October 1995 | Annual 23 Sep 94 - 22 Sep 95 |

**4. TITLE AND SUBTITLE**
Managing Menopausal Symptoms in Breast Cancer Survivors

**5. FUNDING NUMBERS**
DAMD17-94-J-4507

**6. AUTHOR(S)**
Dr. Patricia A. Ganz

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**
University of California, Los Angeles
Los Angeles, California 90024

**8. PERFORMING ORGANIZATION REPORT NUMBER**

**9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)**
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

**10. SPONSORING / MONITORING AGENCY REPORT NUMBER**

**11. SUPPLEMENTARY NOTES**

**12a. DISTRIBUTION / AVAILABILITY STATEMENT**
Approved for public release; distribution unlimited

**12b. DISTRIBUTION CODE**

**13. ABSTRACT** *(Maximum 200 words)*

Symptoms of estrogen deprivation commonly occur in breast cancer survivors as a result of natural menopause, or menopause that is precipitated prematurely by chemotherapy or anti-estrogen therapy with tamoxifen. In this research program we are evaluating the role of a comprehensive menopausal assessment (CMA) and intervention program for management of menopausal symptoms in breast cancer survivors. During the past funding year we have recruited and trained our research staff, developed the intervention and outcome assessment procedures, and pilot-tested the intervention in 9 subjects. We are about to initiate the randomized trial in which we will assign symptomatic postmenopausal breast cancer survivors to an experimental or usual-care group. The experimental group will receive immediate assessment and intervention for their symptoms while the control group will receive no menopause related intervention during a four month period of observation. Systematic assessment of each breast cancer survivor assigned to the intervention will permit treatment of multiple symptoms simultaneously with a variety of non-estrogen pharmacologic, educational and behavioral interventions. We will be assessing the impact of the intervention on quality of life and the resolution of specific menopausal symptoms.

**14. SUBJECT TERMS**
1- Breast Cancer
2- Hot Flashes
3- Menopause
4-Quality of Life
5-Non-estrogen Therapy
6- Tamoxifen

**15. NUMBER OF PAGES**
6

**16. PRICE CODE**

| 17. SECURITY CLASSIFICATION OF REPORT | 18. SECURITY CLASSIFICATION OF THIS PAGE | 19. SECURITY CLASSIFICATION OF ABSTRACT | 20. LIMITATION OF ABSTRACT |
|---|---|---|---|
| Unclassified | Unclassified | Unclassified | Unlimited |

## GENERAL INSTRUCTIONS FOR COMPLETING SF 298

The Report Documentation Page (RDP) is used in announcing and cataloging reports. It is important that this information be consistent with the rest of the report, particularly the cover and title page. Instructions for filling in each block of the form follow. It is important to ***stay within the lines*** to meet ***optical scanning requirements***.

**Block 1.** Agency Use Only *(Leave blank)*.

**Block 2.** Report Date. Full publication date including day, month, and year, if available (e.g. 1 Jan 88). Must cite at least the year.

**Block 3.** Type of Report and Dates Covered. State whether report is interim, final, etc. If applicable, enter inclusive report dates (e.g. 10 Jun 87 - 30 Jun 88).

**Block 4.** Title and Subtitle. A title is taken from the part of the report that provides the most meaningful and complete information. When a report is prepared in more than one volume, repeat the primary title, add volume number, and include subtitle for the specific volume. On classified documents enter the title classification in parentheses.

**Block 5.** Funding Numbers. To include contract and grant numbers; may include program element number(s), project number(s), task number(s), and work unit number(s). Use the following labels:

| | | | |
|---|---|---|---|
| **C** | - Contract | **PR** | - Project |
| **G** | - Grant | **TA** | - Task |
| **PE** | - Program Element | **WU** | - Work Unit Accession No. |

**Block 6.** Author(s). Name(s) of person(s) responsible for writing the report, performing the research, or credited with the content of the report. If editor or compiler, this should follow the name(s).

**Block 7.** Performing Organization Name(s) and Address(es). Self-explanatory.

**Block 8.** Performing Organization Report Number. Enter the unique alphanumeric report number(s) assigned by the organization performing the report.

**Block 9.** Sponsoring/Monitoring Agency Name(s) and Address(es). Self-explanatory.

**Block 10.** Sponsoring/Monitoring Agency Report Number. *(If known)*

**Block 11.** Supplementary Notes. Enter information not included elsewhere such as: Prepared in cooperation with...; Trans. of...; To be published in.... When a report is revised, include a statement whether the new report supersedes or supplements the older report.

**Block 12a.** Distribution/Availability Statement. Denotes public availability or limitations. Cite any availability to the public. Enter additional limitations or special markings in all capitals (e.g. NOFORN, REL, ITAR).

- **DOD** - See DoDD 5230.24, "Distribution Statements on Technical Documents."
- **DOE** - See authorities.
- **NASA** - See Handbook NHB 2200.2.
- **NTIS** - Leave blank.

**Block 12b.** Distribution Code.

- **DOD** - Leave blank.
- **DOE** - Enter DOE distribution categories from the Standard Distribution for Unclassified Scientific and Technical Reports.
- **NASA** - Leave blank.
- **NTIS** - Leave blank.

**Block 13.** Abstract. Include a brief *(Maximum 200 words)* factual summary of the most significant information contained in the report.

**Block 14.** Subject Terms. Keywords or phrases identifying major subjects in the report.

**Block 15.** Number of Pages. Enter the total number of pages.

**Block 16.** Price Code. Enter appropriate price code *(NTIS only)*.

**Blocks 17. - 19.** Security Classifications. Self-explanatory. Enter U.S. Security Classification in accordance with U.S. Security Regulations (i.e., UNCLASSIFIED). If form contains classified information, stamp classification on the top and bottom of the page.

**Block 20.** Limitation of Abstract. This block must be completed to assign a limitation to the abstract. Enter either UL (unlimited) or SAR (same as report). An entry in this block is necessary if the abstract is to be limited. If blank, the abstract is assumed to be unlimited.


*U.S.GPO:1993-0-358-779

## FOREWORD

Opinions, interpretations, conclusions and recommendations are those of the author and are not necessarily endorsed by the US Army.

✓ Where copyrighted material is quoted, permission has been obtained to use such material.

✓ Where material from documents designated for limited distribution is quoted, permission has been obtained to use the material.

✓ Citations of commercial organizations and trade names in this report do not constitute an official Department of Army endorsement or approval of the products or services of these organizations.

N/A In conducting research using animals, the investigator(s) adhered to the "Guide for the Care and Use of Laboratory Animals," prepared by the Committee on Care and Use of Laboratory Animals of the Institute of Laboratory Resources, National Research Council (NIH Publication No. 86-23, Revised 1985).

✓ For the protection of human subjects, the investigator(s) adhered to policies of applicable Federal Law 45 CFR 46.

N/A In conducting research utilizing recombinant DNA technology, the investigator(s) adhered to current guidelines promulgated by the National Institutes of Health.

N/A In the conduct of research utilizing recombinant DNA, the investigator(s) adhered to the NIH Guidelines for Research Involving Recombinant DNA Molecules.

N/A In the conduct of research involving hazardous organisms, the investigator(s) adhered to the CDC-NIH Guide for Biosafety in Microbiological and Biomedical Laboratories.

Patricia Gentz 10/17/95

PI - Signature Date

Fund# DAMD17-94-J-4507

## TABLE OF CONTENTS

**Introduction**

Breast cancer is the leading cause of cancer in women, affecting 1 in 9 women in the US. According to the most recent SEER data, women with breast cancer have a relative 5-year survival rate of over 75%. Earlier detection of breast cancer, as well as improvements in post-operative adjuvant therapies, have enhanced the long term survival for women with this diagnosis. Symptoms of estrogen deprivation commonly occur in breast cancer survivors as a result of natural menopause, or menopause that is precipitated prematurely by chemotherapy or anti-estrogen therapy with tamoxifen. Hormone replacement therapy, the most efficacious treatment for these symptoms, is generally contraindicated in breast cancer survivors because of its potential risk of inducing a recurrence of breast cancer. Thus, many breast cancer survivors endure considerable morbidity and impaired quality of life (QL) as a result. This research program will evaluate the role of a comprehensive menopausal assessment (CMA) and intervention program for management of menopausal symptoms in breast cancer survivors. Using a randomized controlled design, we will assign symptomatic postmenopausal breast cancer survivors to an experimental or usual-care group. The experimental group will receive immediate assessment and intervention for their symptoms while the control group will receive no menopause related intervention during a four month period of observation. Systematic assessment of each breast cancer survivor assigned to the intervention will permit treatment of multiple symptoms simultaneously with a variety of non-hormonal pharmacologic, educational and behavioral interventions. The intervention program will be portable, and suitable for implementation in a variety of health care settings. We will evaluate the impact of the intervention on QL and the resolution of specific menopausal symptoms. QL will be assessed using standardized measures of health status, mood, sexual functioning, and dyadic adjustment. Menopausal symptoms will be monitored using self-report diary cards. Our primary hypothesis is that the intervention program will lead to significant improvement in QL for breast cancer survivors.

**Progress report on first year of funding**

Although the investigators were prepared to launch this study shortly after receipt of funding, two key staff positions (data manager and nurse practitioner) were not filled until early 1995. This delayed the start-up of the project by 3 months. In addition, after several months of employment, it became clear that the nurse practitoner lacked enough research experience to fulfill the job requirements. Thus a search for another candidate was undertaken, with a new nurse practitioner hired in August of 1995. This individual is performing very well, and we have now recouped some of the time lost earlier in the year.

At this point in time we have developed an operations manual for the project, including all forms, randomization and data tracking procedures. All of the outcome instruments and diary cards have been developed and pilot tested, and procedures for handling of laboratory specimens have been standardized. Thus far, in our pilot work, we have screened by telephone a total of 14 breast cancer survivors, of whom 12 were seen for an in-person screening visit. Of those, 4 are in process of further evaluation, 5 have gone on to receive the CMA and intervention, with 1 breast

cancer survivor completing the entire 4 month intervention program. This subject had severe nocturnal hot flashes that were extremely disruptive. By the time the study was completed, her hot flashes were nearly completely resolved on one of the study medications.

Recruitment of subjects has been informal during this pilot phase. With breast cancer awareness month (October 1995), we have obtained some newspaper coverage of the research, and we are beginning our recruitment through physicians offices and clinics. We anticipate initiation of the randomized trial in the coming weeks. As of this time we have no data or findings to report. We expect that we will have no difficulty recruiting subjects for this study and that over the course of the next three years we will complete the randomized trial as planned.

## Conclusions

This past year has been devoted to the hiring and training of research staff, the development of the research procedures and operations manual for the study, as well as pilot-testing of all aspects of the intervention prior to initiation of the randomized trial. Recruitment of subjects for the randomized trial will be the major focus of the next year, with implementation of the full research study in the next few months. There are no data to report from the pilot study at this time.